



2013-14 Enrollment Projections

TO: Dr. Brendan F. Minnihan, Superintendent of Schools, Con Val, NH SAU#1
FROM: Donald G. Kennedy, Ed.D., Demographic Specialist
DATE: December 27, 2013
RE: Enrollment Projections

We are pleased to send you the enclosed documents displaying the past, present, and projected enrollments for the Con Val School District SAU#1. We have used the figures given to us by the district and we assume that the method of collecting the enrollment data has been consistent from year to year.

NESDEC's enrollment projection totals from fall of 2012 came within 50 students of the actual Grade K-12 enrollment total for fall, 2013 (2,285 projected v. 2,335 actual). In Grades K-4, 765 pupils were projected v. 780 enrolled. At the Grade 5-8 level, 661 students were projected v. 686 enrolled. And in Grades 9-12, 859 pupils were forecast v. 869 enrolled.

The two factors now at work which will have the greatest effect upon future enrollments are: a continuing decrease in the number of births to residents of the eight Con Val communities and, to a lesser degree, b. the possibility of a resumption of in-migration (which had slowed or disappeared due to the real estate slowdown). In the decade from 1998-2007, Con Val averaged 166 births per year; more recently (and expected over the next 6-7 years) are about 147-166 births annually...about 10 fewer than previously. Incidentally, **New Hampshire** experienced only about a 3% decline in births from 2007 to 2009 (in large part caused by the economic Recession), the smallest decline among the six New England states. Vermont (4.6%) and **New Hampshire** (5.0%) have the lowest rates of unemployment among the six New England states (and well below RI's 9.1% and CT's 8.1% - MA is 7.2%, ME is 7.0%, and the US average is 7.2%), suggesting that real estate sales may begin to bounce back sooner than the other states in the region...thereby slowing the decline of K-12 students.

The ever-changing relationship between Con Val births and Kindergarten enrollments is displayed on the B-K graph. Con Val, over the past seven years, has registered about 90 Kindergarteners for every 100 births (five years previous), a relationship which has been quite stable...this fall there were 89 Kindergarteners for every 100 births five-years-previous, the fifth highest ratio in over ten years – and the cause of NESDEC’s slight under-projection (144 children forecast v. 148 actual). Note that in 2007, 106 Kindergarteners per 100 births five-years-previous. Grade 1 is expected to be about 3% larger than the previous year’s Kindergarten class – as more children are entering in Kindergarten, as the program is now Full-day.

Like many nearby communities Con Val continues to experience enrollment fluctuations of in/out-migration in Grades 1-8. In the past decade, there have been six years of 1-5% in-migration (+3% in 2013); one flat year; and three years of 1-2% out-migration (-1% in 2012).

Over the next three years, K-4 enrollments are forecast to decrease by a total of 35 students –due primarily to the smaller number of births; Grades 5-8 to shrink by 41 pupils; and the high school to decrease by about 113 pupils...all within the next three years. After that point it is quite likely that real estate turnover will have increased, bringing in more new families. Should that occur, there could be relatively flat enrollments at the K-4 level, and a further slight decline in Grades 5-12 - as noted on the “Projections” page.

Will these patterns really last for as long as ten years? Perhaps not. As soon as the economy and real estate situation improve in the region, additional in-migration may return to Con Val – as it did in 2013. Many communities in the region sold during 2008-2012, and 2013-to-date only about 60-80% as many homes as in 2005-2007. Building permits have slowed as well; see the “Additional Data” table below. See the description on Page 4 below regarding “reliability of projections”.

The birth numbers used in the projections, through 2011, are from the NH Department of Public Health. The “estimated” years, beginning with 2012 are a rolling five-year average, which NESDEC has found to be the most accurate method of estimation. Local Town Clerks have birth information for 2012 and 2013, however do not have access to the numbers of Con Val residents born out-of-state (information which will eventually become known to the NH DPH).

The two most difficult grades to forecast in all districts are Kindergarten and Grade 9. The latter is difficult to anticipate, as there are so many options for Grade 9 (in vocational or agricultural schools, private or parochial non-public schools, etc. Kindergarten can be difficult to project based upon births alone, as many districts have

large numbers of “net move-ins/move-outs” who are ages 1-4. **Some districts take the extra steps to track 3 and 4-year olds with a local census, or report to NESDEC the known number of 4-year olds in local preschools/nursery schools which typically enroll Kindergarteners in the district. Knowing this information helps NESDEC to project Kindergarteners more reliably...as does data from the Kindergarten Screening in districts which also track 3 and 4-year old siblings (or neighbors) at that time. The more data, in addition to births, which is sent to NESDEC, the greater is the chance that “enrollment surprises” will be minimized.**

A word about PK projections: the trend in virtually every district is to serve additional 3 and 4-year olds each year, even if the number of Kindergarteners is in decline. Hence, the rising numbers in PK projections. The reasons why additional 3 and 4-year olds are being served are multiple: more children in need of Special Education services are being identified at early ages, including larger number of students on the autism spectrum. Further, many districts are moving to expand their services to “typically developing” 3 and 4-year olds in order to improve/enhance the educational quality of their existing programs. Longitudinal research continues to indicate both the educational and fiscal benefits of early intervention programs of schooling.

If your district has need for further assistance in the area of long range facilities planning, we urge you to call so that we might discuss our planning services which include our Demographic and Long-Range Enrollment Projection Studies.

We have enclosed suggestions for interpreting the printout and a brief description of the modified cohort survival methodology used in preparing the projections. As always, we would be delighted to hear from you regarding ways in which we might make the enrollment forecasts more useful to you. Please don't hesitate to call or email us at ep@nesdec.org. Best wishes for the school year.

Analyzing Your Enrollment

Historical Public Enrollments

1. After the "YEAR" column can be found the "BIRTHS" column. The number of births to residents for each of eleven years is displayed. Note any trends, e.g., have births been decreasing? increasing? leveling off? Kindergarten and Grade 1 enrollments are normally quite responsive to these fluctuations.
2. Look down the K and 1 columns and note the direction of the trend. This affords a comparison of these classes over a ten-year period. Add the K and Grade 1 enrollments of the first school year recorded, and compare them with the sum of the current K and Grade 1 enrollments.
3. Take the first K class and follow it diagonally to trace its movement to Grade 1, 2, etc. up to its current 10th grade status. This comparison (which can be accomplished for other classes also) gives some measure of the effects of migration in your school district. If a sixth grade class today is larger than it was as a K class six years ago, then in-migration has probably occurred; if it is smaller, then out-migration has probably occurred.
4. Compare each K class with the previous year's graduating class. Note which is larger and by what amount one surpasses the other. Larger graduating classes generally reflect declining enrollments; larger K classes generally indicate increasing enrollments.
5. In the "Grade Combinations" section, note the trends of elementary, middle school/junior high, and high school enrollments. A significant and consistent trend in these summaries usually results in the corresponding trend for projected enrollments. If enrollments are leveling off in the elementary grades after a period of decline, then the secondary enrollments might be expected to continue to decline for several years until the leveling off experience has had time to take hold at the secondary grades.

Enrollment Projections

1. Note the trends exhibited in the total K-12 (or 1-12) projection for the next five years as well as the

projections for various grade combinations. The trends on this page should generally exhibit a continuation of the trends mentioned above for historical enrollments, although the rate of change may be quite different.

2. Look at the births in the most recent years and note whether the trend is up, down, or level.
3. Make similar comparisons as appropriate on this page as were suggested for the "Historical Public Enrollments" page.

PROJECTION METHODOLOGY

The cohort survival technique is the most frequently used method of preparing enrollment forecasts. NESDEC uses that technique, but modifies it in order to move away from forecasts which are wholly computer or formula driven. Such modification permits the incorporation of important, current town-specific information into the generation of the enrollment forecasts. Basically, percentages are calculated from the historical enrollment data to determine a reliable percentage of increase or decrease in enrollment between any two grades. For example, if 100 students enrolled in Grade 1 in 2010-11, increased to 104 students in Grade 2 in 2011-12, the percentage of survival would have been 104% or a ratio of 1.04. Such ratios are calculated between each pair of grades or years in school over several recent years.

After study and analysis of the historical ratios and based upon a reasonable set of assumptions regarding births, migration rates, retention rates, etc., ratios most indicative of future growth patterns are determined for each pair of grades. The ratios thus selected are applied to the present enrollment statistics for a pre-determined number of years. The ratios used are the key factors in the reliability of the projections, given the validity of the data at the starting point. The strength of the ratios lies in the fact that each ratio encompasses collectively the variables that account for increases or decreases in the size of a grade enrollment as it moves on to the next grade. Each ratio represents the cumulative effect of the following factors:

1. Real estate turnover and new residential construction;
2. Migration, in or out, of the schools;
3. Drop-outs, transfers, etc.;
4. Births to residents;
5. Retention in the same grade.

RELIABILITY OF ENROLLMENT PROJECTIONS

Projections can serve as useful guides to school administrators for educational planning. In this regard, the projections are generally most reliable when they are closest in time to the current year. Projections six to ten years out may serve as a guide to future enrollments, and are useful for facility planning purposes. However, they should be viewed as subject to change given the possibility for change in the underlying assumptions/trends.

Projections based upon **the children already in the district** (the current K-12 population only) will be the most reliable; the second level of reliability will be for those children already **born into the community but not yet old enough to be in school**. The least reliable category is the group for which an estimate must be made **to predict the number of births**, thereby adding an additional variable. See these three multi-colored groupings on the “Projected Enrollment” slide/page.

How often do the actual enrollments closely match the NESDEC projections? The research literature reports the closest that enrollment forecasters are likely to come to actual enrollments is about 1% variance per year-from-the-known-data. That is, a 1% variance from projection-to-actual “one-year-out” into the future (2% variance “two-years-out” ... 10% variance “ten-years-out”). NESDEC reaches this “highest possible” standard in about 90% of cases. When our NESDEC variance is greater, the reasons often are one of the following: a. imbedded/intervening “hidden” variables (examples: a parochial school closed or other students returned from non-public schools, a charter school opened, the Kindergarten program changed entrance age or to extended/full-day, the high school toughened its course credit/graduation requirements, the District set new attendance boundaries for elementary schools, or the District had well-publicized budget/referendum difficulties); b. the District size was below 500 students, thus subject to fluctuations; or c. the District has not done enrollment projections on an annual basis.

Annual updates allow for early identification of recent changes in historical trends. When the actual enrollment in a grade is significantly different (high or low) from the projected number, it is important (yet difficult) to determine whether this is a one-year aberration or whether a new trend may be starting. **In light of this, NESDEC urges all school districts to have updated enrollment forecasts developed by NESDEC each October.** This service is available at no cost to affiliated school districts.

Using This Information Electronically

If you would like to extract the information contained in this report for your own documents or presentations, you can use Adobe Acrobat reader to convert the desired information to a “snapshot,” which can be inserted into PowerPoint slides, Word documents, etc. Because the snapshot tool creates a graphic, the image is not editable.

Steps for Using The Snapshot Tool in Adobe Acrobat Reader 8.0:

1. Click on Tools Menu;
2. Choose “Select & Zoom;”
3. Choose “Snapshot Tool;”
4. Click and drag around the text, chart, and/or graphics that you would like to capture: your selection will be copied to the clipboard automatically;
5. Click in the document where you would like the information to appear;*
6. Give Paste command.

If you have an earlier version of Adobe Acrobat and these instructions don’t work for you, contact your tech support person, or NESDEC and we will try to assist you. Telephone (508)481-9444 or ep@nesdec.org. Ask for Peggy, Don, or Carol.

*You may paste your snapshot onto a PowerPoint slide, onto an Excel sheet, or even into a graphics program to save as a separate graphic file (in .jpg or other format), so that it is available for inserting into future documents.

Con Val, NH Historical Enrollment

School District: ConVal, NH, SAU#1

12/27/2013

Historical Enrollment By Grade

Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
1998	159	2003-04	17	175	192	212	197	220	213	239	267	245	337	305	275	252	0	3129	3146
1999	159	2004-05	10	185	184	185	212	193	235	226	235	294	273	323	290	259	11	3105	3115
2000	157	2005-06	31	179	209	188	190	213	205	248	234	253	331	247	312	289	12	3110	3141
2001	171	2006-07	25	176	187	210	203	199	220	215	266	241	289	318	262	285	4	3075	3100
2002	154	2007-08	24	164	184	190	210	195	206	227	217	265	263	274	310	240	0	2945	2969
2003	173	2008-09	37	147	170	179	182	213	208	197	224	214	299	259	248	278	0	2818	2855
2004	188	2009-10	39	166	154	169	170	191	212	207	206	225	235	262	258	252	0	2707	2746
2005	164	2010-11	43	133	167	158	161	163	197	206	194	205	238	217	250	242	0	2531	2574
2006	165	2011-12	49	144	142	175	153	172	154	191	213	207	222	221	201	260	0	2455	2504
2007	166	2012-13	41	153	151	140	171	157	167	155	188	209	224	211	225	198	0	2349	2390
2008	166	2013-14	49	148	157	155	148	172	163	163	161	199	217	222	209	221	0	2335	2384

Historical Enrollment in Grade Combinations

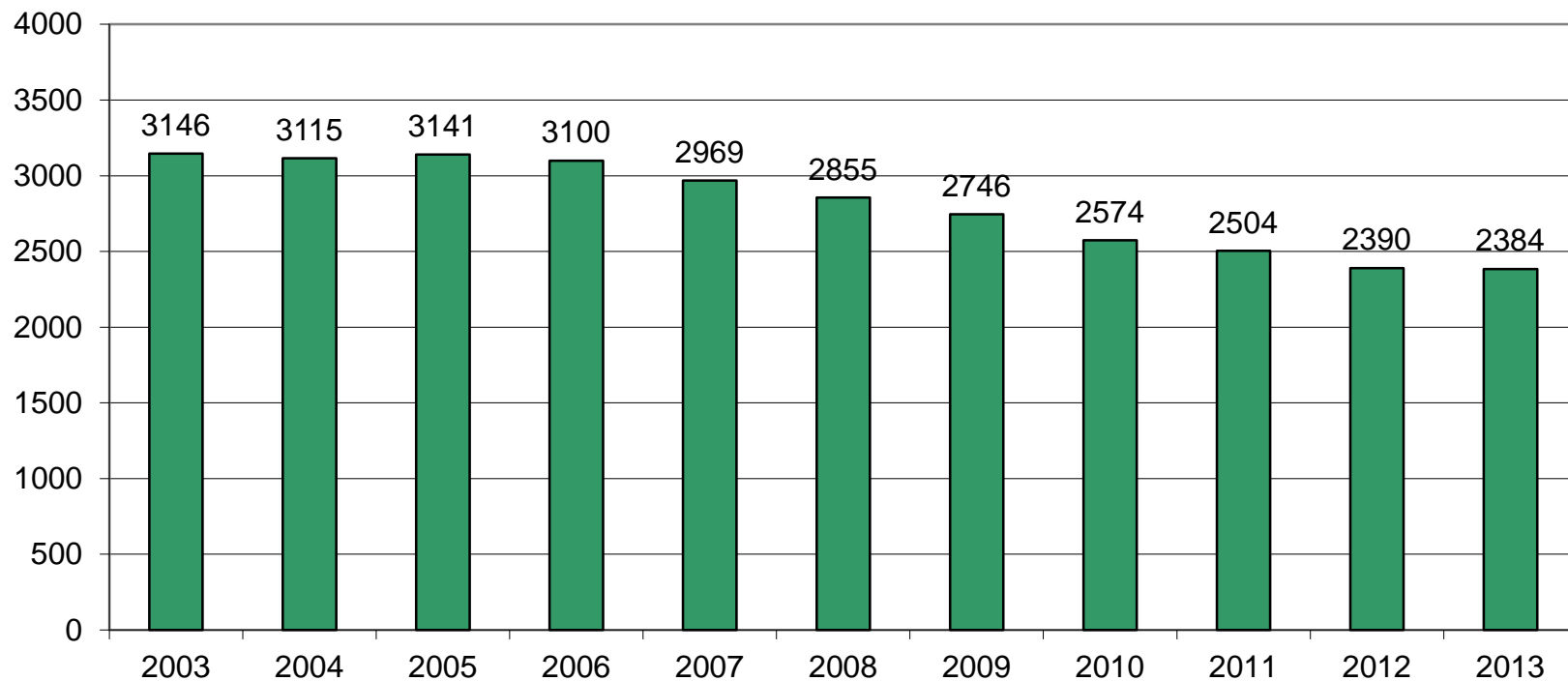
Year	K-4	PK-4	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2003-04	996	1013	1448	1960	964	751	512	1681	1169
2004-05	959	969	1420	1949	990	755	529	1674	1145
2005-06	979	1010	1432	1919	940	735	487	1666	1179
2006-07	975	1000	1410	1917	942	722	507	1661	1154
2007-08	943	967	1376	1858	915	709	482	1569	1087
2008-09	891	928	1296	1734	843	635	438	1522	1084
2009-10	850	889	1269	1700	850	638	431	1438	1007
2010-11	782	825	1185	1584	802	605	399	1346	947
2011-12	786	835	1131	1551	765	611	420	1324	904
2012-13	772	813	1094	1491	719	552	397	1255	858
2013-14	780	829	1106	1466	686	523	360	1229	869

Historical Percentage Changes

Year	K-12	Diff.	%
2003-04	3129	0	0.0%
2004-05	3105	-24	-0.8%
2005-06	3110	5	0.2%
2006-07	3075	-35	-1.1%
2007-08	2945	-130	-4.2%
2008-09	2818	-127	-4.3%
2009-10	2707	-111	-3.9%
2010-11	2531	-176	-6.5%
2011-12	2455	-76	-3.0%
2012-13	2349	-106	-4.3%
2013-14	2335	-14	-0.6%
Change	-794	-25.4%	

Con Val, NH Historical Enrollment

PK-12, 2003-2013



Con Val, NH Projected Enrollment

School District: **ConVal, NH, SAU#1**

12/27/2013

Note: The District has changed to Full-Day Kindergarten, thus some students are entering one year sooner; Preschool has been added at the Peterborough Elementary School.

Enrollment Projections By Grade*																				
Birth Year	Births		School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2008	166		2013-14	49	148	157	155	148	172	163	163	161	199	217	222	209	221	0	2335	2384
2009	165		2014-15	50	148	152	160	155	153	169	160	166	167	212	208	217	210	0	2277	2327
2010	147		2015-16	51	132	152	155	160	160	151	166	163	172	178	203	203	218	0	2213	2264
2011	150	(prov.)	2016-17	52	134	136	155	155	165	158	149	169	169	184	170	199	203	0	2146	2198
2012	159	(est.)	2017-18	53	142	138	139	155	160	162	155	152	175	180	176	166	199	0	2099	2152
2013	157	(est.)	2018-19	54	141	146	141	139	160	158	159	158	157	187	172	172	166	0	2056	2110
2014	156	(est.)	2019-20	55	139	145	149	141	144	158	155	162	164	168	179	168	172	0	2044	2099
2015	154	(est.)	2020-21	56	138	143	148	149	146	142	155	158	168	175	161	175	168	0	2026	2082
2016	155	(est.)	2021-22	57	139	142	146	148	154	144	140	158	164	179	167	158	175	0	2014	2071
2017	156	(est.)	2022-23	58	140	143	145	146	153	152	142	143	164	175	171	163	158	0	1995	2053
2018	156	(est.)	2023-24	59	139	144	146	145	151	151	150	145	148	175	167	167	163	0	1991	2050

*Projections should be updated on an annual basis.

Based on an estimate of births

Based on children already born

Based on students already enrolled

Projected Enrollment in Grade Combinations*									
Year	K-4	PK-4	K-6	K-8	5-8	6-8	7-8	7-12	9-12
2013-14	780	829	1106	1466	686	523	360	1229	869
2014-15	768	818	1097	1430	662	493	333	1180	847
2015-16	759	810	1076	1411	652	501	335	1137	802
2016-17	745	797	1052	1390	645	487	338	1094	756
2017-18	734	787	1051	1378	644	482	327	1048	721
2018-19	727	781	1044	1359	632	474	315	1012	697
2019-20	718	773	1031	1357	639	481	326	1013	687
2020-21	724	780	1021	1347	623	481	326	1005	679
2021-22	729	786	1013	1335	606	462	322	1001	679
2022-23	727	785	1021	1328	601	449	307	974	667
2023-24	725	784	1026	1319	594	443	293	965	672

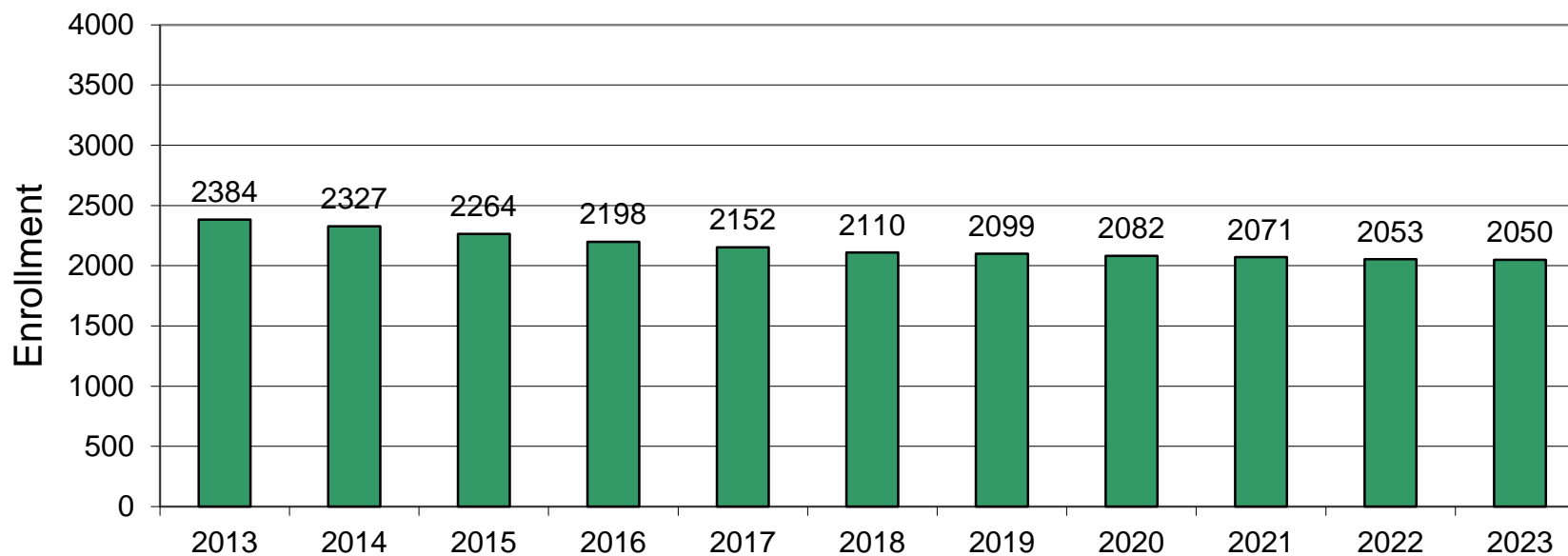
See "Reliability of Enrollment Projections" section of accompanying letter.

Projections are more reliable for Years #1-5 in the future than for Years #6 and beyond.

Projected Percentage Changes			
Years	K-12	Diff.	%
2013-14	2335	0	0.0%
2014-15	2277	-58	-2.5%
2015-16	2213	-64	-2.8%
2016-17	2146	-67	-3.0%
2017-18	2099	-47	-2.2%
2018-19	2056	-43	-2.0%
2019-20	2044	-12	-0.6%
2020-21	2026	-18	-0.9%
2021-22	2014	-12	-0.6%
2022-23	1995	-19	-0.9%
2023-24	1991	-4	-0.2%
Change		-344	-14.7%

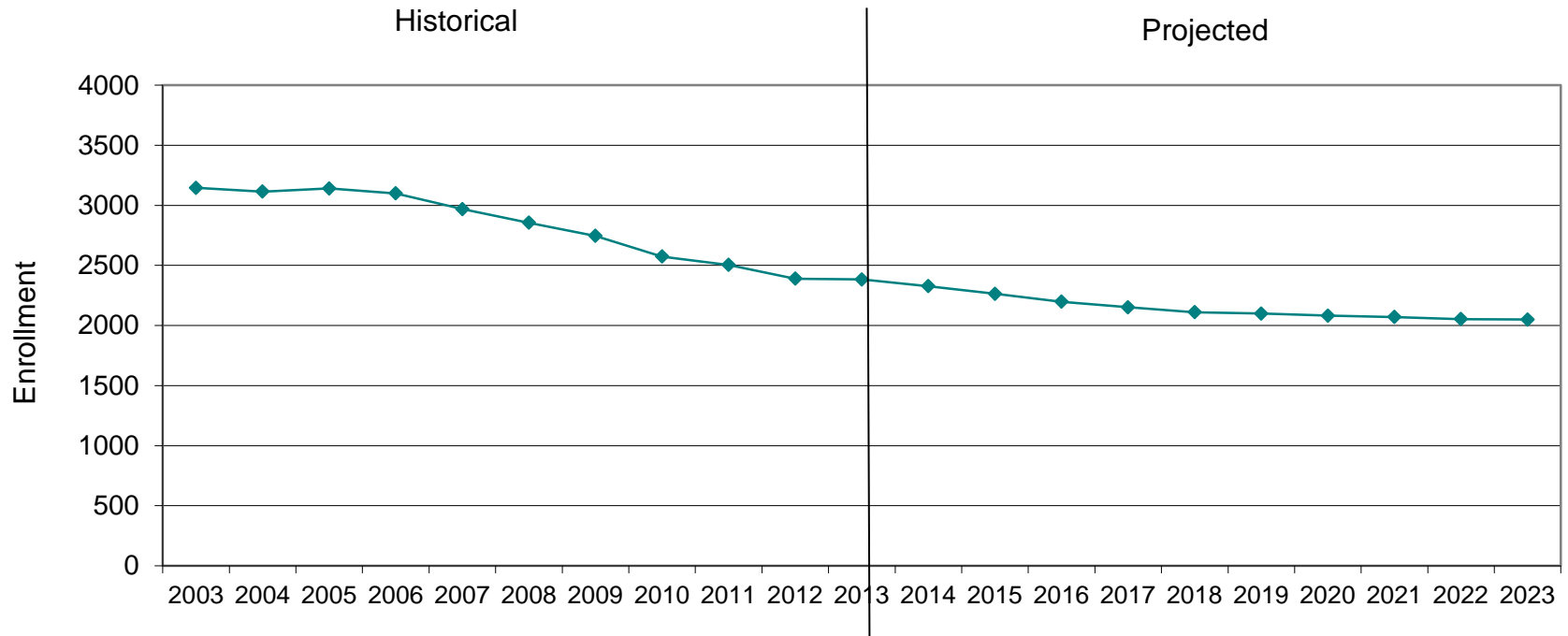
Con Val, NH Projected Enrollment

PK-12 TO 2023 Based On Data Through School Year 2013-14

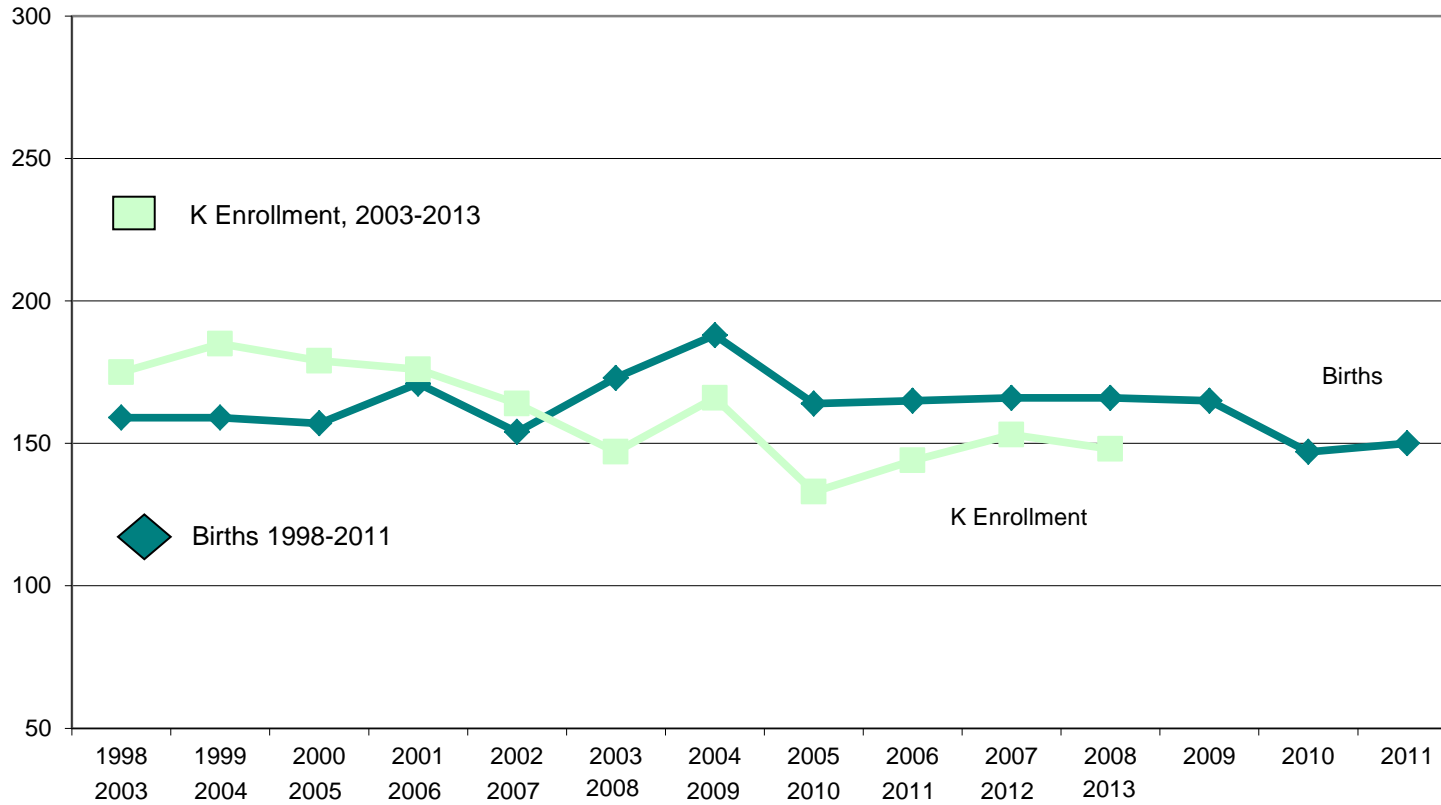


Con Val, NH Historical & Projected Enrollment

PK-12, 2003-2023



Con Val, NH Birth-to-Kindergarten Relationship



Con Val, NH Additional Data

Building Permits Issued		
Year	Single-Family	Multi-Units
2005	100	4
2009	17	0
2010	12	0
2011	22	30
2012	21	0
2013	4 to Oct 31	0

Enrollment History		
Year	Voc-Tech 9-12 Total	Non-Public K-12 Total
2000-01	45	n/a
2009-10	483	n/a
2010-11	515	n/a
2011-12	618	n/a
2012-13	385	n/a
2013-14	235	n/a

Source: HUD and Building Department

Residents in Non-Public Independent and Parochial Schools (Regular Education)														
Enrollments as of Oct. 1	K	1	2	3	4	5	6	7	8	9	10	11	12	K-12 TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	n/a

K-12 Home-Schooled Students	
2013	39

K-12 Residents "Choiced-out" or in Charter or Magnet Schools	
2013	0

K-12 SpEd Outplaced Students	
2013	14

K-12 Choiced-In, Tuitioned-In, & Other Non-Residents	
2013	4

The above data were used to assist in the preparation of the enrollment projections. If additional demographic work is needed, please contact our office.